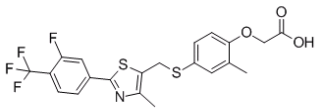
Data Sheet

Product Name:	GW0742
Cat. No.:	HY-13928
CAS No.:	317318-84-6
Molecular Formula:	$C_{21}H_{17}F_4NO_3S_2$
Molecular Weight:	471.49
Target:	PPAR; PPAR
Pathway:	Cell Cycle/DNA Damage; NF–κB
Solubility:	DMSO: ≥ 34 mg/mL



BIOLOGICAL ACTIVITY:

GW0742 (GW610742) is a potent and highly selective PPARδ agonist. EC50 values are 1nM, 1.1μM and 2 μM for transactivation of human PPARδ, –α, and –γ receptors respectively.
IC50 value: 1nM, 1.1μM and 2 μM (EC50, for PPARδ, –α, and –γ)
Target: PPAR
in vivo: GW0742 is a synthetic high affinity PPAR β/δ agonist, and its possible role in preventing the advance of inflammatory and apoptotic processes induced by bleomycin, that long–term leads to the appearance of pulmonary fibrosis. Our data showed that GW0742–treatment (0.3 mg/Kg, 10 percent DMSO, i.p.) has therapeutic effects on pulmonary damage, decreasing many inflammatory and apoptotic parameters detected by measurement of: 1) cytokine production; 2) leukocyte accumulation, indirectly measured as decrease of myeloperoxidase (MPO) activity; 3) IkBα degradation and NF–kB nuclear translocation; 4) ERK phosphorylation; 5) stress oxidative by NO formation due to iNOS expression; 6) nitrotyrosine and PAR localization; 7) the degree of apoptosis, evaluated by Bax and Bcl–2 balance, FAS ligand expression and TUNEL staining. Taken together, our results clearly show that GW0742 reduces the lung injury and inflammation due to the intratracheal BLEO—instillation in mice.[1]

References:

[1]. Galuppo M, et al. GW0742, a high affinity PPAR–β/δ agonist reduces lung inflammation induced by bleomycin instillation in mice. Int J Immunopathol Pharmacol. 2010 Oct–Dec;23(4):1033–46.

Caution: Product has not been fully validated for medical applications. For research use only.

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